

Appl. No. 10/807,724

Amdt. Dated November 29, 2005

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the above-identified application:

1 – 20 (Cancelled).

21. (New) A support member configured to be disposed between a first and a second core pole of a rotor, the support member comprising:

a wedge including an axially extending wall, a first and a second side wall, a first and a second end, and a first and a second end wall, the first and second side walls extending radially from and integrally formed with the axially extending wall, and the first and second end walls formed at the first and second ends integrally with the axially extending wall and the first and second sidewalls;

a plurality of cavities formed in the wedge between the first and the second ends;
and

a first and a second radial member extending axially from and integrally formed as part of the first and the second end walls, respectively.

22. (New) The support member of claim 21, wherein at least one web is formed between two cavities of the plurality of cavities.

23. (New) The support member of claim 21, further comprising:
a plurality of holes formed in the first side wall

24. (New) The support member of claim 23, further comprising:
a bonding material impregnated through the plurality of holes.

25. (New) The support member of claim 21, wherein the wedge comprises
metal.

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26. (New) The support member of claim 21, wherein the wedge comprises reinforced epoxy plastic.

27. (New) A support system configured to be disposed between a first and a second core pole of a rotor, each having a first end and a second end, the support system comprising:

a wedge including an axially extending wall, a first and a second side wall, a first and a second end, and a first and a second end wall, the first and second side walls extending radially from and integrally formed with the axially extending wall, and the first and second end walls formed at the first and second ends integrally with the axially extending wall and the first and the second side walls;

a plurality of cavities formed within the wedge between the first and the second end walls;

a first and a second radial member each extending axially from and integrally formed as part of the first and the second end walls, respectively, the first and second radial members each configured to extend beyond the first and second core pole ends, respectively, when the wedge is disposed in the rotor; and

a first and a second band configured to at least partially surround the first and second radial members, respectively, to secure the wedge to the rotor.

28. (New) The support system of claim 27, wherein at least one web is formed between two cavities of the plurality of cavities.

29. (New) The support system of claim 27, further comprising:
a plurality of holes formed in the first side wall

30. (New) The support system of claim 29, further comprising:
a bonding material impregnated through the plurality of holes.

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31. (New) A generator comprising:
- a rotor comprising:
 - a shaft; and
 - a first and a second core pole extending radially from the shaft and defining a space therebetween, each of the first and second core poles having a first and a second end; and
 - a support system disposed between the first and second core poles, the support system comprising:
 - a wedge disposed within the space and including an axially extending wall, a first and a second side wall, a first and a second end, and a first and a second end wall, the first and second side walls extending radially from and integrally formed with the axially extending wall, and the first and second end walls formed at the first and second ends integrally with the axially extending wall and the first and the second side walls;
 - a plurality of cavities formed within the wedge between the first and the second end walls;
 - a first and a second radial member each extending axially from and integrally formed as part of the first and the second end walls, respectively, and configured to extend beyond the first and second core pole ends when the wedge is disposed in the rotor; and
 - a first and a second band at least partially disposed around the first and second radial members, respectively, to secure the wedge to the rotor.

32. (New) The generator of claim 31, wherein the first and second core poles each include pole tips extending at least partially into the space therebetween.

33. (New) The generator of claim 31, wherein at least one web is formed between two cavities of the plurality of cavities.

34. (New) The generator of claim 31, further comprising:

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a plurality of holes formed in at least the first side wall

35. (New) The generator of claim 31, further comprising:

a bonding material impregnated through the plurality of holes and configured to bond the wedge first wall to the first core pole.